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**TRANSMITTAL  
FORM**

*(to be used for all correspondence after initial filing)*

<b>TRANSMITTAL FORM</b>  <i>(to be used for all correspondence after initial filing)</i>	Application Number	10/046,926
	Filing Date	1/13/02
	First Named Inventor	Steven Teig
	Group Art Unit	2825
	Examiner Name	
Total Number of Pages in This Submission		Attorney Docket Number
		SPLX.P0085

**Enclosures (Check all that apply)**

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
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<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Or Individual name	Mani Adeli, Reg. No. 39,585 of Stattler Johansen & Adeli LLP
Signature	
Date	November 13, 2003

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<b>Typed or printed name</b>	Mani Adeli			
<b>Signature</b>		<b>Date</b>	November 13, 2003	

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PATENT  
Docket No. SPLX.P0085

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Mani Adeli

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Steven Teig

Serial No.: 10/046,926

Filing Date: 1/13/02

For: **ROUTING METHOD AND  
APPARATUS**

**INFORMATION DISCLOSURE  
STATEMENT UNDER 37 C.F.R. § 1.97**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, applicants submit with this Information Disclosure Statement the attached Form PTO-1449, and copies of the documents listed in the 1449 form for consideration by the Examiner. The Examiner is requested to make these documents of record. Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

This Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to

the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

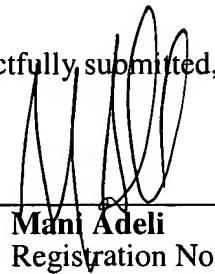
This Information Disclosure Statement is submitted within three months of the application filing date or before the mailing date of a first Office Action on the merits; accordingly, no fee or separate requirements are required.

However, in the unlikely event that the Patent Office determines that additional fees, extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 50-1128** referencing SPLX.P0085. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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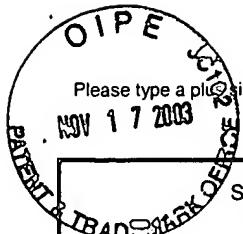
Respectfully submitted,

By: \_\_\_\_\_

  
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Registration No. 39,585

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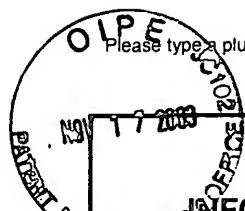
Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				Application Number	10/046,926
				Filing Date	1/13/02
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	
Sheet	1	of	7	Attorney Docket Number	SPLX.P0085

U.S. PATENT DOCUMENTS					
Examiner* Initials	Cite No. <sup>1</sup>	U.S. Patent Document Number	Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	2001/0009 031	A1 07-19-2001	Nitta et al.	
	2.	2002/0182 844	A1 12-05-2002	Igarashi et al.	
	3.	2003/0005 399	A1 01-02-2003	Igarashi et al.	
	4.	4,593,363		Burstein et al.	
	5.	5,267,176		Antreich et al.	
	6.	5,566,078		Ding et al.	
	7.	5,587,923		Wang	
	8.	5,618,744		Suzuki et al.	
	9.	5,635,736		Funaki et al.	
	10.	5,637,920		Loo	
	11.	5,640,327		Ting	
	12.	5,663,891		Bamji et al.	
	13.	5,757,089		Ishizuka	
	14.	5,784,289		Wang	
	15.	5,798,936		Cheng	
	16.	5,838,583		Varadarajan et al.	
	17.	5,889,677		Yasuda et al.	
	18.	5,980,093		Jones et al.	
	19.	6,070,108		Andreev et al.	
	20.	6,128,767		Chapman	

Examiner Signature		Date Considered
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				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	
Sheet	2	of	7	Attorney Docket Number	SPLX.P0085

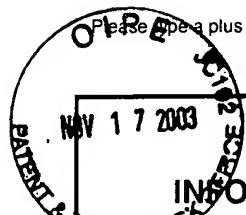
U.S. PATENT DOCUMENTS					
21.	6,150,193		11-21-2000	Glenn	
22.	6,209,123	B1	03-27-2001	Maziasz et al.	
23.	6,219,832	B1	04-17-2001	Buzbee	
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27.	6,295,634	B1	09-25-2001	Matsumoto	
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35.	6,415,422	B1	07-02-2002	Mehrotra et al.	
36.	6,442,743	B1	08-27-2002	Sarrafzadeh et al.	
37.	6,448,591	B1	09-10-2002	Juengling	
38.	6,473,891	B1	10-29-2002	Shively	
39.	6,480,991	B1	11-12-2002	Cho et al.	
40.	6,490,713	B2	12-03-2002	Matsumoto	
41.	6,519,751	B2	02-11-2003	Sriram et al.	
42.	6,543,043	B1	04-01-2003	Wang et al.	
43.	6,546,540	B1	04-08-2003	Igarashi et al.	

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Sheet	3	of	7	Filing Date	1/13/02
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	
				Attorney Docket Number	SPLX.P0085

U.S. PATENT DOCUMENTS					
	44.	6,557,145	B2	04-29-2003	Boyle et al.
	45.	6,567,967	B2	05-20-2003	Greidinger et al.

FOREIGN PATENT DOCUMENTS								
Examiner* Initials	Cite No. <sup>1</sup>	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>	
Office <sup>3</sup>	Number <sup>4</sup>	Kind Cod (if known)						
	46.	JP	411296560	A	Matsumoto et al.	10-29-1999	with English translation of Abstract;	
	47.	JP	2000-82743	A	Igarashi et al.	03-21-2000	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	48.	JP	H03-173471	A	Tawada et al.	07-26-1991	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	49.	JP	H05-243379	A	Masako Kubota	09-21-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	50.	JP	H05-102305	A	Akihiro Sato	04-23-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓

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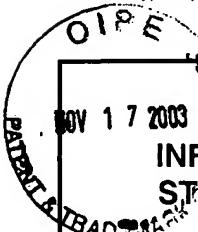
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	4	of	7	Application Number	10/046,926
				Filing Date	1/13/02
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	
				Attorney Docket Number	SPLX.P0085

### FOREIGN PATENT DOCUMENTS

							application.	
	51.	JP	H07-86407	A	Shinpei Miura	03-31-1995	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	52.	JP	H09-162279	A	Masaaki Yoshida	06-20-1997	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet	5	of	7	Application Number	10/046,926
				Filing Date	1/13/02
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	
				Attorney Docket Number	SPLX.P0085

**FOREIGN PATENT DOCUMENTS****NON PATENT LITERATURE DOCUMENTS**

Examiner* Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. <sup>2</sup>	T <sup>3</sup>
	53.	Ahuja, R. et al., Faster Algorithms for the Shortest Path Problem, Journal of the Association for Computing Machinery, vol. 37, No. 2, April 1990, pp. 213-223.	
	54.	Brady, L. et al., Channel Routing on a 60° Grid, extended abstract, pp. 956-931.	
	55.	Brambilla, A. et al., Statistical Method for the Analysis of Interconnects Delay in Submicrometer Layouts, IEEE, 8/2001, pp. 957-966.	
	56.	Carothers, K., A Method of Measuring Nets Routability for MCM's General Area Routing Problems, 1999, pp. 186-192.	
	57.	Chen, H. et al., Physical Planning of On-Chip Interconnect Architectures, 2002, IEEE, International Conference, pp. 30-35.	
	58.	Cheng, K., Steiner Problem in Octilinear Routing Model, a Thesis Submitted for the Degree of Master of Science, National University Singapore, 1995, pp. 1-122.	
	59.	Chip Model with Wiring Cost Map, August 1983, IBM Technical Disclosure Bulletin, vol. 26, iss. 3A, pp. 929-933.	
	60.	Cong, J. et al., Efficient Heuristics for the Minimum Shortest Path Steiner Arborescence Problem with Applications to VLSI Physical Design, Cadence Design Systems and UCLA Computer Science Department, pp.88-95.	
	61.	Cong, J. et al., Performance-Driven Multi-Layer General Routing for PCB/MCM Designs, UCLA Computer Science Department, 1998, pp. 356-361.	
	62.	Enbody, R. et al., Near-Optimal $n$ -Layer Channel Routing, 23 <sup>rd</sup> Design Automation Conference, 1986, pp. 708-714.	
	63.	Fang, S. et al., Constrained Via Minimization with Practical Considerations for Multi-Layer VLSI/PCB Routing Problems, 28 <sup>th</sup> ACM/IEEE Design Automation Conference, 1991, pp. 60-65.	
	64.	Horn, I. et al., Estimation of the Number of Routing Layers and Total Wirelength in a PCB Through Wiring Distribution Analysis, 1996, pp. 1-6.	
	65.	Hong, X. et al., Performance-Driven Steiner Tree Algorithms for Global Routing, 30 <sup>th</sup> ACM/IEEE Design Automation Conference, 1993, pp. 177-181.	

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				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	
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				Filing Date	1/13/02
				First Named Inventor	Steven Teig
				Group Art Unit	2825
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